Amendments to the CLAIMS:

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

LISTING OF CLAIMS:

1. (Canceled).

2. (Currently Amended) The micromechanical component according to claim [[1]] 6, wherein:

the porous material is formed from a material of the substrate.

3. (Currently Amended) The micromechanical component according to claim [[1]] 6, wherein:

a hollow space is formed underneath the region.

4. (Currently Amended) The micromechanical component according to claim [[1]] 6, wherein:

the diaphragm is formed by oxidizing a surface of the substrate and a surface of the region.

5. (Currently Amended) The micromechanical component according to claim [[1]] 6, wherein:

the region is completely oxidized.

6. (Currently Amended) ~~The micromechanical component according to claim 1, further comprising:~~ A micromechanical component, comprising:

a substrate;

a diaphragm positioned on the substrate;

a region arranged underneath the diaphragm and made of a porous material, the region mechanically supporting and thermally insulating the diaphragm; and

a dew point sensor, including:

a thermocouple for measuring a temperature and arranged above the region,

an interdigital capacitor made of the porous material and arranged above the region,

a Peltier element device including at least one Peltier element for heating and cooling the diaphragm, and

a dew point measuring device for measuring a dew point with the aid of one of the following:

a mirror for optical evaluation, and

a capacitance of the interdigital capacitor and a temperature measured by the thermocouple.

7. (Currently Amended) ~~The micromechanical component according to claim 1, further comprising:~~ A micromechanical component, comprising:

a substrate;

a diaphragm positioned on the substrate;

a region arranged underneath the diaphragm and made of a porous material, the region mechanically supporting and thermally insulating the diaphragm; and

a heat radiation sensor including:

an absorption device for absorbing a heat radiation provided above the region,

a Peltier element device including at least one Pelter element for generating a thermoelectric voltage corresponding to a temperature difference between a diaphragm region next to the region and a diaphragm region above the region, and

a temperature measuring device for measuring a temperature in the diaphragm region above the region.

8. (Previously Presented) The micromechanical component according to claim 7, wherein:

the temperature measuring device measures the temperature in the diaphragm region above the region based upon the thermoelectric voltage.

9. (Previously Presented) The micromechanical component according to claim 7, further comprising:

a control device that operates the Peltier element device to control the temperature in the diaphragm region above the region, wherein:

the temperature measuring device measures the temperature in the diaphragm region above the region based on a regulated output.

10. (Canceled).

11. (Canceled).

12. (Previously Presented) A micromechanical component, comprising:

a substrate;

a diaphragm positioned on the substrate;

a region arranged underneath the diaphragm and made of a porous material, the region mechanically supporting and thermally insulating the diaphragm; and

a dew point sensor including:

a thermocouple for measuring a temperature and arranged above the region,

a capacitor made of the porous material and arranged above the region,

a Peltier element device including at least one Peltier element for heating and cooling the diaphragm, and

a dew point measuring device for measuring a dew point.

13. (Previously Presented) The micromechanical component according to claim 12, wherein:

the porous material is formed from a material of the substrate.

14. (Previously Presented) The micromechanical component according to claim 12, wherein:

the diaphragm is formed by oxidizing a surface of the substrate and a surface of the region.

15. (Previously Presented) The micromechanical component according to claim 12, wherein:

a hollow space is formed underneath the region

16. (Previously Presented) The micromechanical component according to claim 12, wherein:

the region is completely oxidized.

17. (Previously Presented) The micromechanical component according to claim 12, wherein the porous material is formed from a material of the substrate, a hollow space is formed underneath the region, the diaphragm is formed by oxidizing a surface of the substrate and a surface of the region, and the region is completely oxidized.

18. (Previously Presented) A micromechanical component, comprising:

a substrate;

a diaphragm positioned on the substrate;

a region arranged underneath the diaphragm and made of a porous material, the region mechanically supporting and thermally insulating the diaphragm; and

a heat radiation sensor including:

an absorption device for absorbing a heat radiation provided above the region,

a Peltier element device including at least one Pelter element for generating a thermoelectric voltage corresponding to a temperature difference between a diaphragm region next to the region and a diaphragm region above the region, and

a temperature measuring device for measuring a temperature in the diaphragm region above the region;

wherein at least one of the following is provided: the porous material is formed from a material of the substrate, a hollow space is formed underneath the region, the diaphragm is formed by oxidizing a surface of the substrate and a surface of the region, and the region is completely oxidized.

19. (Previously Presented) The micromechanical component according to claim 18, wherein:

the temperature measuring device measures the temperature in the diaphragm region above the region based upon the thermoelectric voltage.

20. (Previously Presented) The micromechanical component according to claim 18, further comprising:

a control device that operates the Peltier element device to control the temperature in the diaphragm region above the region, wherein the temperature measuring device measures the temperature in the diaphragm region above the region based on a regulated output.

21. (New) A micromechanical sensor, comprising:

a substrate;

a diaphragm positioned on the substrate; and

a region arranged underneath the diaphragm and made of a porous material, the region mechanically supporting and thermally insulating the diaphragm.

22. (New) A dew point sensor, comprising:

a substrate;

a diaphragm positioned on the substrate; and

a region arranged underneath the diaphragm and made of a porous material, the region mechanically supporting and thermally insulating the diaphragm.

23. (New) A micromechanical component, comprising:

a substrate;

a closed diaphragm positioned on the substrate; and

region arranged underneath the diaphragm and made of a porous material, the region mechanically supporting and thermally insulating the diaphragm.

24. (New) The micromechnical component of claim 6, wherein the micromechanical component is a micromechanical sensor.

25. (New) The micromechnical component of claim 7, wherein the micromechanical component is a micromechanical sensor.

26. (New) The micromechnical component of claim 12, wherein the micromechanical component is a micromechanical sensor.

27. (New) The micromechnical component of claim 18, wherein the micromechanical component is a micromechanical sensor.

28. (New) The micromechnical component of claim 6, wherein the micromechanical component is a dewpoint sensor.

29. (New) The micromechnical component of claim 7, wherein the micromechanical component is a dewpoint sensor.

30. (New) The micromechnical component of claim 12, wherein the micromechanical component is a dewpoint sensor.

31. (New) The micromechnical component of claim 18, wherein the micromechanical component is a dewpoint sensor.

32. (New) The micromechnical component of claim 6, wherein the diaphragm is a closed diaphragm.

33. (New) The micromechnical component of claim 7, wherein the diaphragm is a closed diaphragm.

34. (New) The micromechnical component of claim 12, wherein the diaphragm is a closed diaphragm.

35. (New) The micromechnical component of claim 18, wherein the diaphragm is a closed diaphragm.